

The Confederated Tribes Of Warm Springs

Presentation to DOE Department of Renewable Energy

October, 2005

*for
Geothermal Development Potential
on
Confederated Tribes of Warm Springs
Reservation of Oregon*

Prepared by: Warm Springs Power Enterprises



History with Energy Developments

- Intro to Power business in 1955 with the development of the Pelton Project.
- 1970 with the installation of three 3 Mw steam turbines at Warm Springs Forest Products Industries (WSFPI).
- 1982 completed the installation of the Pelton Reregulating Dam Hydroelectric Project
- 1990 began preliminary Geothermal reconnaissance
- 2003 began wind energy assessment on tribal lands, currently underway
- 2004 working with Tribal, State, Federal and private firms to expand Biomass at WSPFI complex. Replacing existing units with one 15 Mw unit Co-Gen plant.

STATE OF OREGON



CTWS Geothermal Assessment Program

Warm Springs Power Enterprises is the business entity of the Tribes charged with managing energy developments and investigating development opportunities.

Warm Springs Power Enterprises is the lead developer of a grant from the Department of Energy to explore geothermal potential on reservation land.

Geothermal Project Participants

- Tribal Council, 11 members
- Jim Manion, General Manager WSPE
- Morris Holliday, Operations Assistant WSPE
- David McClain, Project oversight, DW McClain Associates
- GeothermEx, Inc.
- Power Systems Engineers, Inc
- Warm Springs GEO Visions Enterprises
- CTWS Natural Resources Branch
- Tribal Attorneys

Project Overview

- Review information that was compiled by Cal Energy back in 1990.
- What is the potential for a commercial development of a geothermal project.
- What is the current environmental constraints for such a development.
- What infrastructure is necessary to interconnect a development.
- What are current energy market conditions.

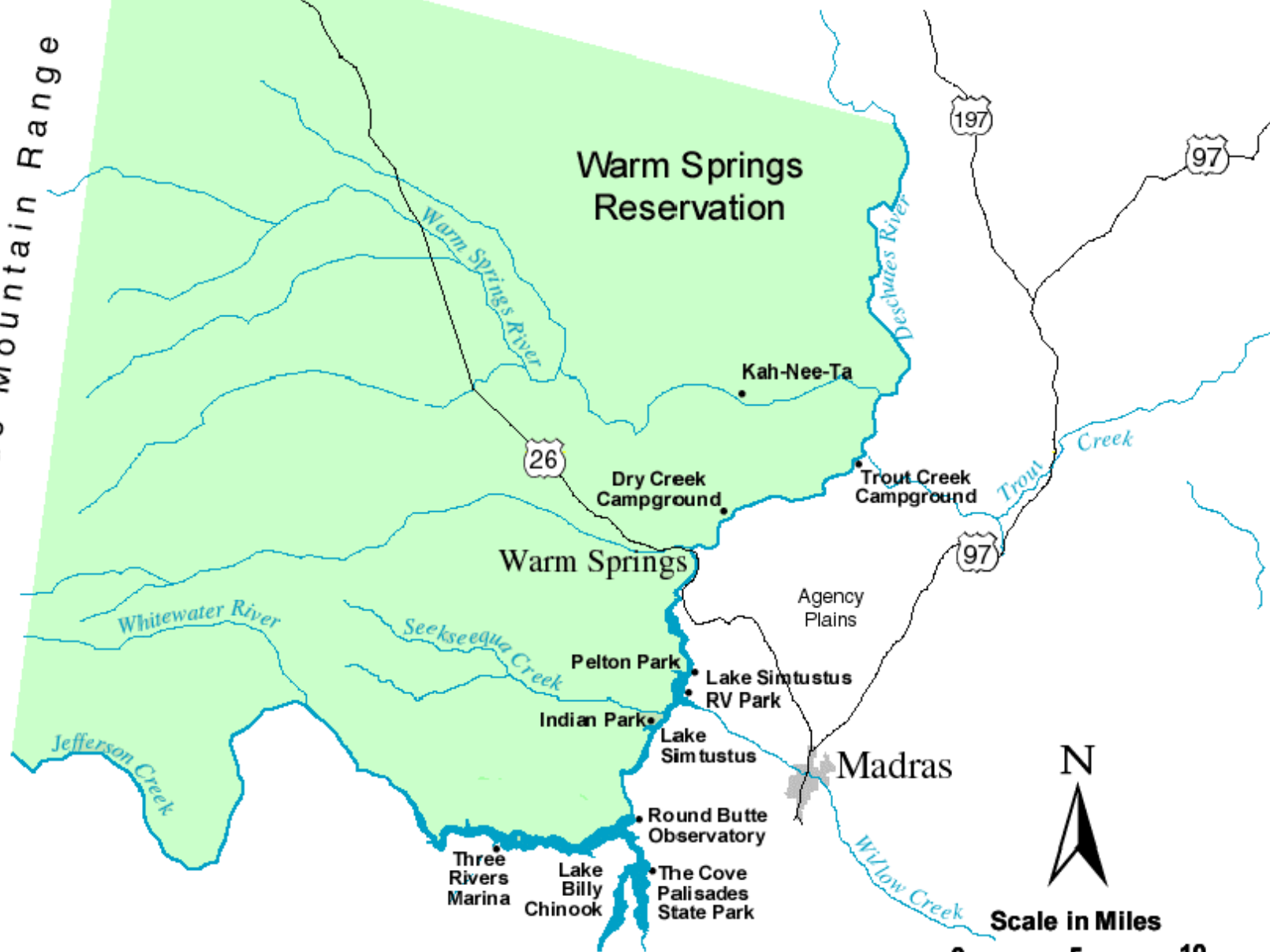


Geothermal exploration summary

- January 1990 Tribal Council visits Geothermal developments.
- June 1990 Tribal Council enters into MOU with Cal Energy.
- November 1990 Cal Energy submitted report to Tribal Council.
- Conclusion was promising for resource potential
- Energy Markets not at level to proceed.
- 2005 CTWS receives grant from DOE to confirm previous findings and to complete a preliminary review of the next step in the exploration stage.

Cascade Mountain Range

Warm Springs Reservation



197

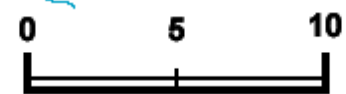
97

26

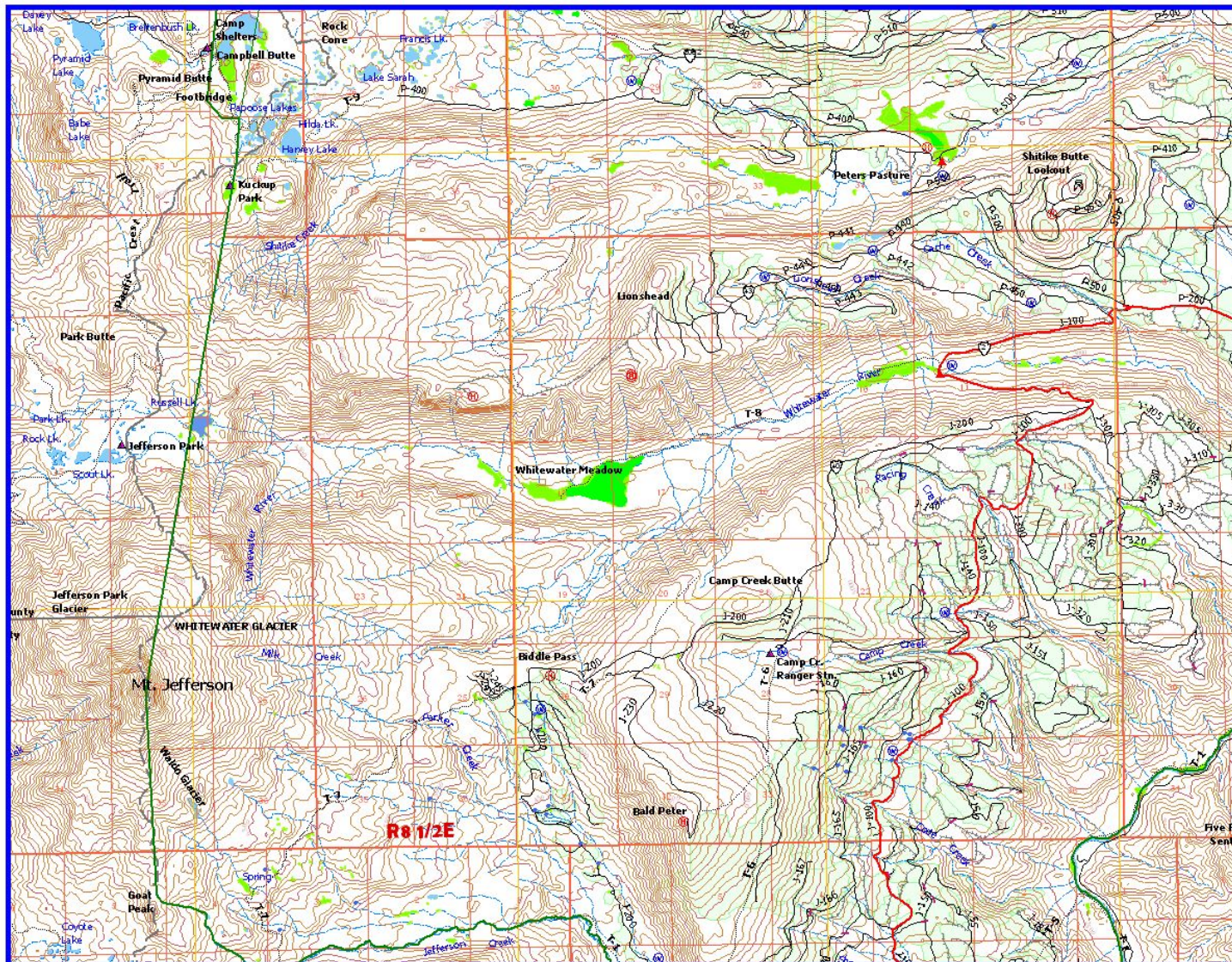
97



Scale in Miles







Geothermal Map

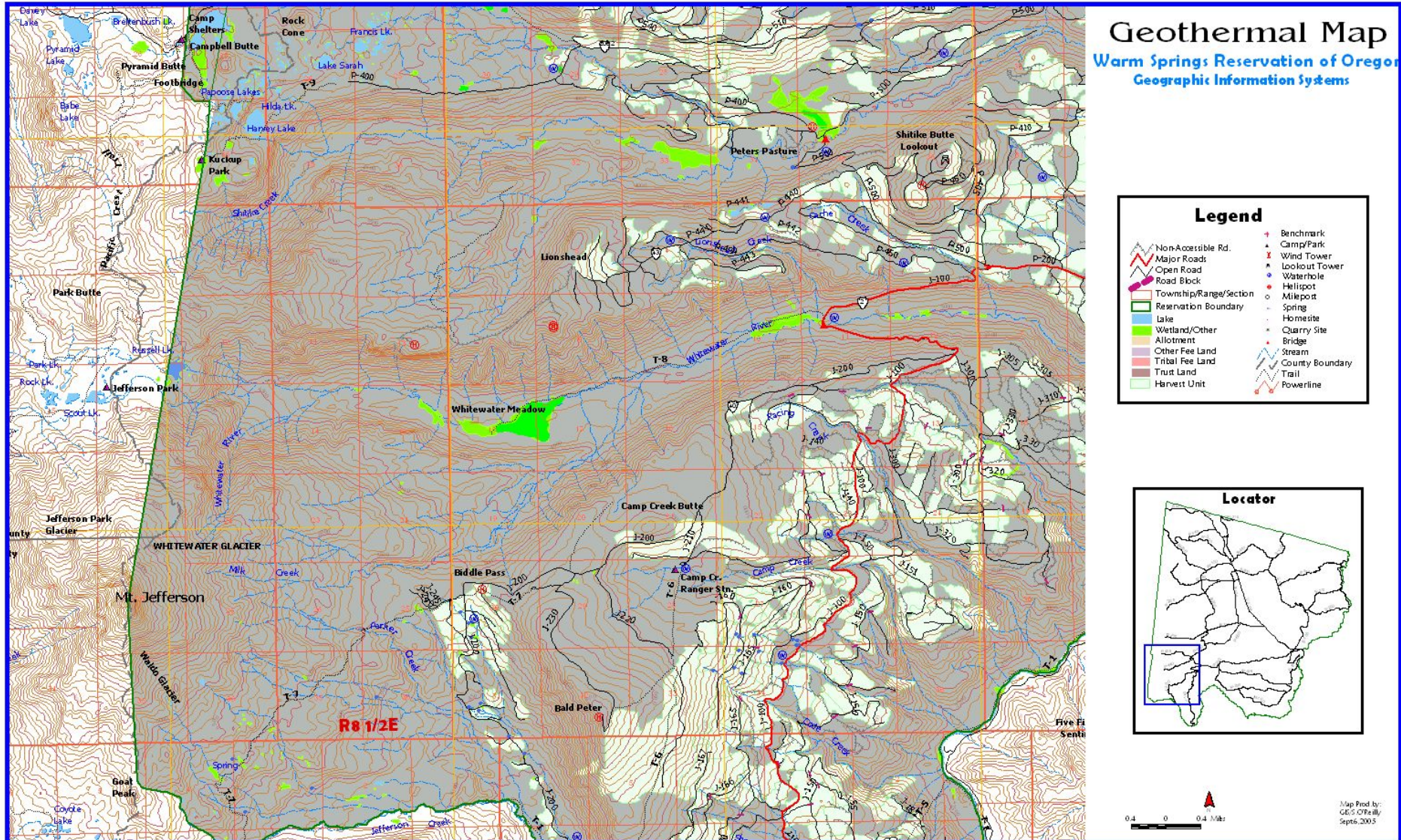
Warm Springs Reservation of Oregon

Geographic Information Systems

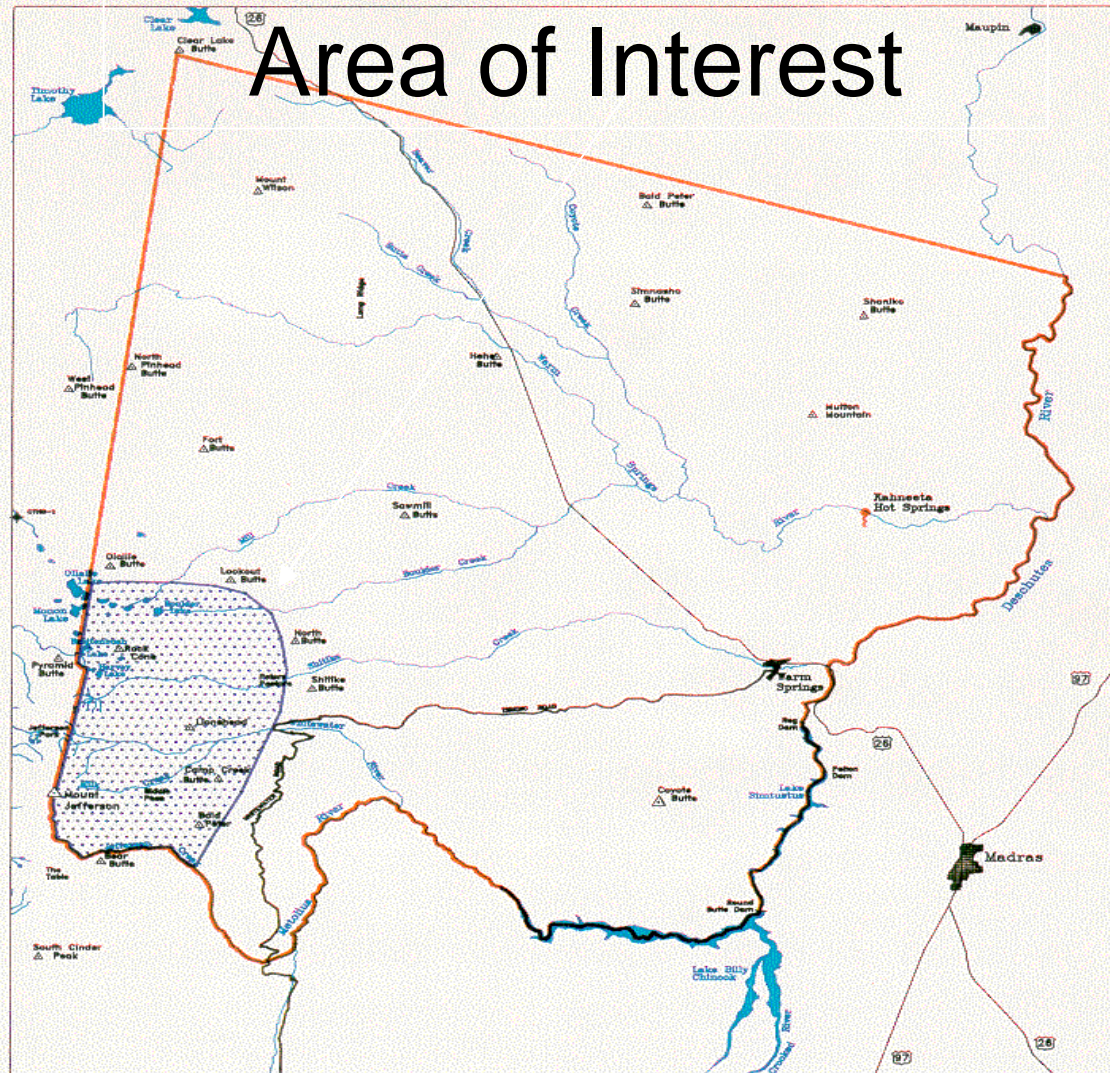


Map Prod. by:
G.E.S. O'Reilly
Sept. 2005

Area Showing Forested Grounds



Area of Interest



- Confederated Tribes of Warm Springs Reservation Boundary
- Area of Geothermal Energy Exploration
- 27 Federal Highway
- Primary Road

0 5 10 15 Miles



CE EXPLORATION COMPANY
ORIENTATION
MAP

Figure 1

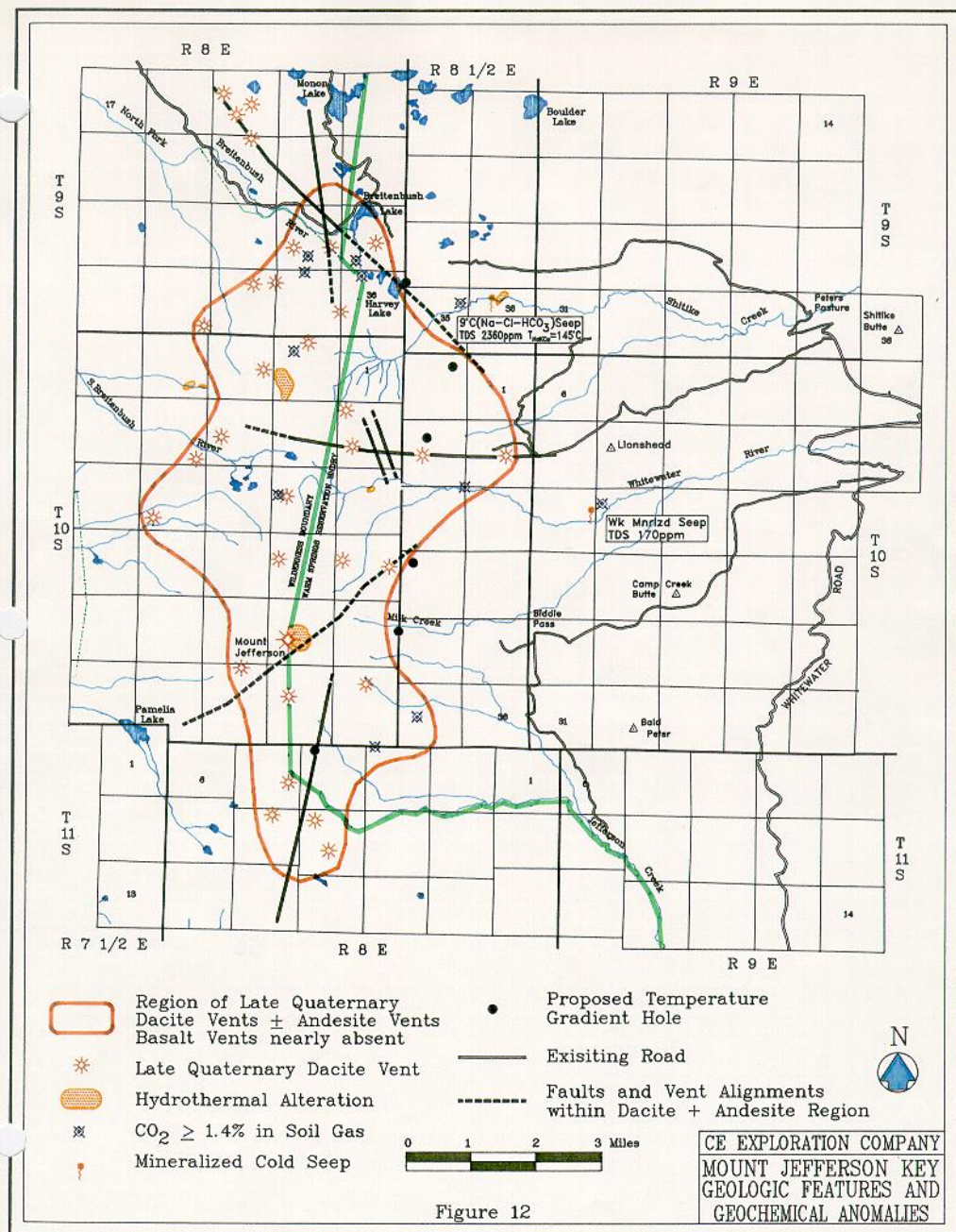


Figure 12

Objectives

- To investigate the possibilities of geothermal energy development.
- Discovery of any significant environmental barriers.
- Review transmission interconnection options.
- Prepare current economic modeling
 - Market pricing
 - Interconnection costs
 - Social acceptance of such a development
 - Preliminary financing

Progress to Date

- Reached agreement with DOE on award August 10th, 2005.
- GeothermEX out in field for two days performing initial exploratory reconnaissance

Future Development

- Still accessing potential.
- Developer's, don't call us quite yet, still compiling data and we will announce if and when we are ready to move to next stage.

MINERALS AND ENERGY RESOURCES OF THE WARM SPRINGS INDIAN RESERVATION

excerpt for IRMP Document of CTWS

- **Mission Statement:** The prudent development of natural resources (consistent with the Tribal cultural framework), for the benefit of the Tribal members.

Closing

- Tribal Council supports continued review for possible future exploration.
- Market driven decisions to advance to development stage.
- Natural resource considerations paramount in development options.
- Yet to complete the social sensitivity analysis.

A scenic view of a river or lake at sunset, with mountains in the background and evergreen trees in the foreground. The sky is a mix of orange and yellow, with the sun low on the horizon. The water reflects the warm colors of the sky. The mountains are silhouetted against the bright sky. In the foreground, the dark green needles of evergreen trees are visible.

Questions or comments?

Thank you for your time